

AMENDMENTS TO THE CLAIMS

The following is a complete, marked up listing of revised claims with a status identifier in parentheses, underlined text indicating insertions, and strikethrough and/or double-bracketed text indicating deletions.

LISTING OF CLAIMS

1. (Currently Amended) A method for recording graphic data and[[/]] subtitle data on a recording medium, comprising ~~the steps of:~~

receiving video data and additional data including at least one of graphic data and/orand subtitle data; and

recording the additional data on the recording medium by dividing and organizing the additional data [[in]]such ~~a way~~that the additional data is included in a plurality of distinct regions ~~that will be overlaid~~that do not overlap with each other~~on a video image constructed from the video data, the additional data divided and organized into the plurality of regions based on positions where the additional data is to be displayed~~

wherein the additional data is included in a plurality of sub-planes based on a type of the additional data, each of the sub-planes including at least one of the distinct regions, and wherein each of the distinct regions of each of the sub-planes includes an object so that the additional data of each of the regions of each of the sub-planes are configured to be overlaid in the video image.

2. (Currently Amended) The method set forth in claim 1, wherein the graphic data and subtitle data are organized into distinct sub-planesregions.

3. (Currently Amended) The method set forth in claim 1, wherein ~~the plurality of regions do not overlap with each other on the video image~~ the video data is included in a main plane.

4. (Currently Amended) The method set forth in claim 1, wherein each of the plurality of ~~regions~~sub-planes includes at least one object.

5. (Currently Amended) The method set forth in claim [[4]]1, wherein the object is at least one of text, an icon, an image, [[or]]and a background box.

6. (Currently Amended) A method for recording graphic data and [[/]] subtitle data on a recording medium, comprising ~~the steps of:~~

receiving video data and additional data including at least one of graphic data and/or subtitle data; and

recording the additional data as a plurality of individual, parallel streams on the recording medium such that two types of additional data included in a same region are respectively recorded in two separate parallel streams, and two types of additional data included in different regions in a same plane are recorded in a same stream in serial.

7. (Original) The method set forth in claim 6, wherein the number of the plurality of streams is the same as the number of graphic decoders contained in a reproducing apparatus.

8. (Currently Amended) The method set forth in claim 6, wherein parts of the additional data that should be simultaneously decoded are placed in distinct streams.

9. (Currently Amended) A computer readable medium encoded with a data structure,
comprising:

~~having video data and additional data including at least one of graphic data and/or and~~
subtitle data,

~~wherein the additional data is divided and organized [[in]]such a way that the additional~~
~~data is included in a plurality of distinct regions that will be overlaid are configured not to overlap~~
~~with each other on a video image constructed from the video data, the additional data divided and~~
~~organized into the plurality of regions based on positions where the additional data is to be~~
~~displayed,~~

wherein the additional data is configured to be included in a plurality of sub-planes based on
a type of the additional data, each of the sub-planes including at least one of the distinct regions, and
wherein each of the distinct regions of each of the sub-planes is configured to have its own
object so that the additional data of each of the regions of each of the sub-planes are configured to
be overlaid in the video image, and the computer readable medium having is configured to have an
information area storing information files for managing reproduction of the video data and the
additional data.

10. (Previously Presented) The computer readable medium set forth in claim 9, wherein the
graphic data and subtitle data are organized into distinct regions.

11. (Currently Amended) A computer readable medium encoded with a data structure,
comprising:

~~having video data and additional data including at least one of graphic data and/or and~~
subtitle data,

wherein the additional data is recorded such that two types of additional data included in a same region are respectively recorded in two separate parallel streams, and two types of additional data included in different regions in a same plane are recorded in a same stream in serial as a plurality of individual, parallel streams, and the computer readable medium having is configured to have an information area storing information files for managing reproduction of the video data and the additional data.

12. (Currently Amended) The computer readable medium set forth in claim 11, wherein parts of the additional data ~~that should be~~ are simultaneously decoded are placed in distinct streams.

13. (Currently Amended) An apparatus for recording graphic data and[[/]] subtitle data on a recording medium, comprising:

~~first means for receiving~~a receiver configured to receive video data and additional data including at least one of graphic data ~~and/or~~ subtitle data;
~~second means for dividing and organizing~~a control circuit configured to divide and organize the additional data ~~[[in]]~~ such a way that the additional data is included in a plurality of distinct regions that do not overlap with each other~~will be overlaid on a video image constructed from the video data, the additional data divided and organized into the plurality of regions based on positions where the additional data is to be displayed;~~ and

~~third means for recording~~a recorder configured to record the additional data and the video data on the recording medium,

wherein the additional data is included in a plurality of sub-planes based on a type of the additional data, each of the sub-planes including at least one of the distinct regions, and
wherein each of the regions of each of the sub-planes includes an object so that the

additional data of each of the regions of each of the sub-planes are configured to be overlaid in the video image.

14. (Currently Amended) The apparatus set forth in claim 13, wherein the ~~second means places control circuit is configured to place~~ the graphic data and subtitle data in distinct sub-planes~~regions~~.

15. (Currently Amended) An apparatus for recording graphic data and[[/]] subtitle data on a recording medium, comprising:

~~first means for receiving~~a receiver configured to receive video data and additional data including at least one of graphic data ~~and/or~~ subtitle data;

~~second means for organizing~~a control circuit configured to organize the additional data such that two types of additional data included in a same region are respectively recorded in two separate parallel streams, and two types of additional data included in different regions in a same plane are recorded in a same stream in serial as a plurality of individual, parallel streams; and

~~third means for recording~~a recorder configured to record the additional data and the video data on the recording medium.

16. (Currently Amended) The apparatus set forth in claim 15, wherein the number of streams organized by the ~~second means~~control circuit is configured to have the same as the number of graphic decoders included in the apparatus.

17. (Currently Amended) The apparatus set forth in claim 15, wherein the ~~second means places~~control circuit is configured to place parts of the additional data that should be simultaneously decoded in distinct streams.

18. (Currently Amended) A method for reproducing a recording medium, comprising the steps of:

reproducing video data and additional data including at least one of graphic data and/or subtitle data recorded on the recording medium, the additional data divided and organized into a plurality of sub-planes presentation regions based on positions where the additional data is to be displayed, each of the sub-planes divided into a plurality of distinct regions that do not overlap with each other;

decoding the reproduced video data to construct a main plane and decoding the additional data to construct the[[a]] plurality of sub-planes including the presentation regions; and

constructing a video image by mixing the main plane with the plurality of sub-planes and outputting the constructed video image so that the additional data in each of the regions of each of the sub-planes is configured to be overlaid in the video image.

19. (Currently Amended) The method set forth in claim 18, wherein the plurality of sub-planes include a subtitle plane and a graphic plane.

20. (Original) The method set forth in claim 19, wherein the subtitle plane includes decoded graphic data as well as decoded subtitle data.

21. (Currently Amended) An apparatus for reproducing a recording medium, comprising:
~~first means for reproducing a reproducer configured to reproduce~~ video data and additional data including at least one of graphic data and/or subtitle data recorded on the recording medium, the additional data divided and organized into a plurality of sub-planes presentation

regions based on positions where the additional data is to be displayed, each of the sub-planes is divided into a plurality of distinct regions that do not overlap with each other;

second means for decoding a decoder configured to decode the reproduced video data to construct a main plane and decoding to decode the additional data to construct [[a]]the plurality of sub-planes including the presentation regions; and

third means for constructing a constructor configured to construct a video image by mixing the main plane with the plurality of sub-planes and outputting to output the constructed video image so that the additional data in each of the regions of each of the sub-planes is configured to be overlaid in the video image.

22. (Currently Amended) The apparatus set forth in claim 21, wherein the decoder is configured to organize second means organizes the additional data into a subtitle plane and a graphic plane.

23. (Currently Amended) The apparatus set forth in claim 22, wherein the decoder is configured to organize second means organizes the subtitle plane such that the subtitle plane includes decoded graphic data as well as decoded subtitle data.

24. (Previously Presented) The method set forth in claim 1, wherein the graphic data and the subtitle data are decoded by different decoders.

25. (Previously Presented) The computer readable medium set forth in claim 9, wherein the graphic data and the subtitle data are decoded by different decoders.